

Telemedicine-Enabled 2014-2017 Urgent Care NYS BIP Grant Results

Urgent Care Program served 2000 individuals with developmental disabilities and featured a nurse call center to triage inbound urgent calls. Their dispositions included sending a nurse to provide a home visit with or without a telemedicine rollerbag for diagnostic assessment with a remote physician. There was a segmentation model that allowed customized interventions based on acuity, activation and residence type. The program also tested the use of remote monitoring devices for chronically ill enrollees. Here are the notable findings:

- Greater than 86% reduction in ER visits due to Telemedicine virtual visits. In February 2017 the telemedicine diagnostic rollerbag was given to each urgent care program nurse, when it became evident that their in-home visits were not sufficient to enable the physician to diagnose and treat more complex prevalent conditions. This technology increased the reduction in ER/urgent care visits to greater than 86% across 253 visits.
- Telemedicine net savings alone could have covered the entire cost of the grant. Projections of potential savings associated with the 218 telemedicine visits that averted ER and in-patient admissions range from just over \$550k to over \$2M, depending on the assumptions used in the estimates. Although the telemedicine component was available only for the final 8 months of the program; savings projections indicate that had telemedicine been in use throughout the entire 3 years of the program, it would have more than paid for cost of the \$6M grant in net savings.
- 50% Faster access to care with telemedicine visits. An average visit to the ER takes 195 minutes, inclusive of travel and wait time. The average telemedicine visit took 98 minutes from the time of the call to intervention. Average visits to the Urgent Care Clinic are about the same, but with a telemedicine visit there is no disruption to the enrollee or house, no enrollee travel, no extra staff needed, no behavioral outbursts in the clinic. Availability was extended into off-hours and weekends.
- Significant impact on the lowest activated, highest acuity enrollees. The Urgent Care Program team developed a segmentation model to identify enrollees with the highest acuity and lowest activation scores i.e., the sickest individuals needing the most support. There is evidence that high need enrollees naturally gravitated toward the program's services. Looking at patient activation scores alone, there was significant improvement in the baseline scores of the lowest activated individuals who used the services of the grant. The average patient activation score change among Level 1's was 68% improvement, and 42% improvement for Level 2's, indicating a higher level of patient engagement with their health.
- Overall reductions in highest cost utilization. By the end of the first 12 months of their enrollment in the program, utilization by individuals decreased 26% on medical inpatient services and 20% on behavioral health inpatient services, compared to the comparison group.
- 25% reduced risk of cardiac events and 37% reduced risk of stroke. Biometric devices were left in the home or residence to capture daily readings of vital signs for the most severely diastolically and systolically hypertensive individuals. For those monitored for blood glucose, improvement translated into a 48% reduced risk of microvascular complications, 56% reduced risk of peripheral vascular disease and 21% reduced risk of heart failure.
- 99% of enrollees and their caregivers wanted the urgent care program to continue. Overall, all respondents to the customer satisfaction survey reported that they always or sometimes felt that the person under care was treated with respect, the program nurses arrived at the residence when expected and helped the person with their concern, and that the call center followed up. Regarding the program's in-home telemedicine visits, respondents felt that the enrolled person liked the video visits better than going out to the clinic or the ER, and that seeing the provider at home via video reduced anxiety.